



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,783	06/13/2006	Koji Moriyama	291921US0PCT	5030
22850 7590 11/30/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER HAUTH, GALEN H				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
11/30/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/582,783

Applicant(s)

MORIYAMA ET AL.

Examiner

GALEN HAUTH

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8, 9 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 9, and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/22)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Acknowledgment is made to applicant's amendment of claims 8, 9, and 12 as well as applicant's cancellation of claims 1-7, 1-11, and 13-19.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 8, 9, and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 8 requires that the flexible polyolefin resin comprises: a homopolymer of an alpha olefin, a copolymer of two or more alpha olefins, **and** a copolymer of ethylene and one or more alpha olefins. The specification as originally filed does not disclose a flexible polyolefin resin which contains all three elements, a homopolymer and a copolymer of the two alpha olefins, and a copolymer of ethylene and one or more alpha olefins, but rather as seen in paragraph 0017 of the specification using either a homopolymer or a copolymer. Claims 9 and 12 depend upon claim 8 and are therefor also rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 8, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu (PN 4877840) in view of Minami et al. (Pub No 2003/0069320).

- a. With regards to claim 8, Chu teaches a method for granulating polyolefins (abstract) in which a resin composition comprising a flexible polyolefin resin of homopolymers or copolymers of alpha olefins and ethylene (col 2 ln 18-32) are melted in an extruder (col 4 ln 5-8) and then are melt kneaded while cooling the resin to a temperature of the melting point of the resin or less (abstract). Chu does not teach that the polymerization is carried out with a metallocene catalyst or the claimed properties and composition of the polyolefin.
- b. Minami teaches a polymer having superior flexibility, low stickiness, and transparency formed with a melting point between 0-100 degrees Celsius

(abstract) and a crystallization time of 3 minutes or more (Table 3). Minami teaches that the polymer is a homopolymer or copolymers of 1-butene and ethylene with other alpha olefins (§ 0035-0038) similar to the material used in Chu. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the material of Minami in the process of Chu, because Minami teaches an alpha olefin based material that has superior flexibility, low stickiness, and transparency (abstract) and alpha olefin based materials are used in Chu. Minami does not teach that the flexible olefin comprises a homopolymer of an alpha olefin, a copolymer of two or more alpha olefins, and a copolymer of ethylene and an alpha olefin, but does teach that the flexible olefin may be a homopolymer of an alpha olefin or a copolymer of an alpha olefin and ethylene or another alpha olefin. Additionally Minami teaches using blends of homopolymers and copolymers (§ 0339). It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to use a blend of a homopolymer of an alpha olefin, a copolymer of two or more alpha olefins, and a copolymer of ethylene and an alpha olefin in the process of Chu, because such is an obvious combination of possible materials given the teachings of all the materials and the possibility for combination. With regards to the PP isotacticity of the resin, Minami teaches a similar resin comprised of similar materials polymerized in a similar way with a similar catalyst and possessing similar properties such as crystallization time, PB isotacticity

(stereoregularity index), and melt temperature. The material would therefore inherently possess the claimed mol% of isotacticity.

NOTE: Where ... the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product. **Whether the rejection is based on "inherency" under 35 USC § 102, on prima facie obviousness" under 35 USC § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products."** In re Best, 562 F2d 1252, 1255, 195 USPQ 430, 433-4 (CCPA 1977).

- c. With regards to claim 9, Chu teaches that the extruder varies in temperature from 200 degrees Celsius in the first zone at the beginning of the extruder to 65 degrees Celsius in the cooling zone at the end of the extruder (col 6 In 17-18), but failed to positively teach a cooling rate of 5-300 °C/min. However, absent any showing of unexpected benefit, the cooling rate claimed by the applicant would have been obvious in the art as such is taken to be a **result effective variable**, and would have been routinely optimized by those versed in the art.
- d. With regards to claim 12, Minami teaches the PB isotacticity of less than 20 (abstract).

Response to Arguments

7. Applicant's arguments with respect to claims 8, 9, and 12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **GALEN HAUTH** whose telephone number is (571)270-5516. The examiner can normally be reached on **Monday to Thursday 8:30am-5:00pm ET**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571)272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GHH/

/Christina Johnson/
Supervisory Patent Examiner, Art Unit 1791